

ACCESSION NR: AP4009914

S/0057/64/034/001/0003/0010

AUTHOR: Rubin, S.B.; Tsy*tovich, V.N.

TITLE: On the non-linear energy loss by a charge moving through a plasma

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.1, 1964, 3-10

TOPIC TAGS: plasma, cold plasma, non-linear waves, moving charge in plasma, charge cluster

ABSTRACT: The relativistic motion of a distribution of charge (cluster of charged particles) through a cold plasma is treated in the hydrodynamic approximation. Only the motion of the electrons is considered, the role of the ions being only to assure that the plasma as a whole is neutral. The dimensions of the moving charge distribution may be comparable with the wavelength of the waves it excites; therefore non-linear effects may be important, and these are taken into account. Only such motions are considered as do not give rise to multi-velocity flow (turbulence). The relativistic hydrodynamic equations are written in cylindrical coordinates. The moving charge distribution is transformed to rest at the origin of coordinates, and it is assumed that the azimuthal velocity remains zero. Maxwell's equations are in-

Card 1/3

ACC.NR: AP4009914

roduced and two non-linear equations are derived for two velocity functions. One of these functions is the usual relativistic quantity $(1-v^2)^{-1/2}$ and the other is essentially the stream function. The electromagnetic field strengths are expressed in terms of these velocity functions. The non-linear equations for the plasma velocity are linearized by assuming the dependent variables to differ only slightly from their undisturbed values. The linearized equations are solved and an expression is obtained for the rate of energy loss by the moving charge. The rate of energy loss is proportional to the square of the total charge, in agreement with the usual linear theory. The non-linear plasma equations, of course, cannot be solved in general. Two special cases are discussed: 1) the longitudinal dimension of the moving charge is small, although its transverse dimensions are not; 2) the transverse dimensions of the moving charge are small, although its longitudinal dimension is not. Conditions for the appearance of multi-velocity flows are quoted from earlier work (V.N.Tsy*tovich, DAN SSSR, 142, No. 63, 1962) and it is concluded that in the ultra-relativistic case there is a wide range of conditions in which the non-linear effects are important and turbulence does not develop. For case 1) the solution is completed and an involved expression is obtained for the rate of energy loss by the moving charge. The equations for case 2) are simplified by expanding in powers of the radius and retaining only the lowest order terms. The equations are reduced to those

Card 2/3

ACC.NR: AP4009914

of a one dimensional problem which, it is asserted, can be treated as was case 1).
/Abstracter's note: The exposition in this section relies heavily on the earlier
work cited above. It is shown that by assuming an expression for one of the velocity
functions, the other velocity function and the corresponding charge distribution
can be obtained. An example is worked through and a very involved expression
is obtained for the charge distribution. "The authors are sincerely grateful to
V.I.Veksler for continued interest and numerous discussions." Orig.art.has: 52
formulas.

ASSOCIATION: none

SUBMITTED: 10Dec62

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: PH

NR REF SOV: 003

OTHER: 000

Card 3/3

L 08393-67 EWP(a)/EWP(m)/EWP(w)/EWP(v)/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(c) JD/

ACC NR:

AP6032495

WW/HW/EM

SOURCE CODE: UR/0413/66/000/017/0048/0048

INVENTOR: Rubin, Sh. G.; Safronov, N. N.

ORG: none

TITLE: Gas-arc welder. Class 21, No. 185421

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 48

TOPIC TAGS: welding equipment, nonconsumable electrode welding, gas arc welding, gas arc welder

ABSTRACT: An Author Certificate has been issued describing a gas-arc welding unit with a consumable electrode for internal and external welds primarily of thin-walled shells. The welder includes a rotating device with a headstock and spindle, a welding torch, and a release mechanism with hoses for supplying shielding gas and oil. To ensure the supply of shielding gas, directly under the welding spot, the welder is equipped with a pendulum mechanism made in the shape of a central shaft carrying feed and distributor blocks together with a clamp flange, and a pressure spring. A swinging load is fastened to the axis.

Cord 1/2

UDC: 621.791.85.037

L 08393-67

ACC NR: AP6032495

To prevent hose twisting, a combined collector is mounted by a bracket on the headstock. The collector is of the shape of a stationary ring with inlet pipes for connecting hoses. The ring is fastened to the headstock and rigidly coupled with the hollow spindle of the headstock of the internal shaft. The latter is provided with ring shaped grooves located under the feed holes linked with channels drilled inside the shaft. [Translation]

SUB CODE: 13/ SUBM DATE: 26Jun63/

Card 2/2 a/s

Rubin, Sh. G.

AID P - 5593

Subject : USSR/Engineering

Card 1/1 Pub. 107-a - 5/12

Authors : Yerokhin, A. A., Kand. of Tech. Sci., and Sh. G. Rubin, Eng.

Title : Equipment for manufacturing standard electrodes by high-pressure presses.

Periodical : Svar. proizv., 11, 20-23, N 1956

Abstract : The authors present the EU-2 electrode-coating installation, its technical data and productivity table. They also provide a description of the EP-275 electrode-coating press, and technical data of the PB-210 briquetting press, the SB-1 mixer and the APO-2 leveling and cutting wire automatic machine. Four photos, 2 drawings, 2 tables; 7 Russian references (1950-55).

Institution : As above

Submitted : No date

YEROKHIN, A.A., kandidat tekhnicheskikh nauk; RUBIN, Sh.G., inzhener.

Equipment and techniques of manufacturing standard type electrodes
on heavy presses. Svar. proizv. no.11:20-23 N '56. (MLRA 10:9)
(Electrodes) (Power presses)

L 43890-65 EPA(s)-2/EWP(k)/EWA(c)/EWT(m)/EWP(b)/I/EWP(v)/EWP(t) Pf-4 JD/HM
ACCESSION NR: AP5010895 UR/0286/65/000/007/0083/0083

34
B

AUTHOR: Rubin, Sh. G.

TITLE: A console type device for automatic over-and-under arc welding of sheets
and plates under a protective gas. Class 21, No. 169718 16

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 83

TOPIC TAGS: arc welding, welding equipment, welding technology

ABSTRACT: This Author Certificate presents a console-type device for automatic
over-and-under arc welding of sheets and plates under protective gas. The device
includes a console, welding electrode, and hoses carrying leads to welding electrode

Following the above are also provided

ASSOCIATION: none

Card 1/2

L 43890-65

ACCESSION NR: AP5010895

SUBMITTED: 0 May 63

ENCL: 00

SUB CODE: IE, M4

NO REF SOV: 000

OTHER: 000

APPROVED FOR RELEASE: 08/22/2000

CIA-RDP86-00513R001445810018-9"

Card 2/2 CC

RUBIN, S. I.

Gruzooborot rechnogo transporta v 3-i stalinskoj piatiletke. (River shipping in the third Stalin five-year plan). (Vodnyi transport, 1937, no. 7, p. 9-10). LC: HE561.R8

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

RUBIN S. 7

Thermometric titration of acetaldehyde in presence of organic and inorganic acids.
 S. I. RUBIN. *J. Applied Chem.* (U. S. S. R.) 5, 463-46 (1932).—The thermometric method
 of Sornya for titrating AcH (C. A. 23, 1840, 4908) is very satisfactory. V. K.

ASR:SLA METALLURGICAL LITERATURE CLASSIFICATION

CA 10

Wood alcohol oils. S. I. Rubin and S. S. Medvedev. *Applied Chem.* (U. S. S. R.) 6, 311-19(1953).—In the investigation of wood alc. oils the following substances were detected: in the water-insol. part: EtCOCHMe, EtCOPr and MeCOBu; in the water-sol. part: acetone, EtCOCHMe, cyclopentanone, allyl and crotonyl alcs., and (CH₃OMe). The main constituent of the oil is a ketone, this making it a valuable solvent. A. A. B.

ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION

The gasoline method of separating solid bitumens from primary tars. V. E. Rakovskii and S. I. Rubins. *Kkies. Toedugo Topliva* 5, 131-6(1934).—Low-temp. carbonization tar from the Redkinskii peat was dild. with naphtha b. 70-100°; asphaltenes, paraffin and solid substances were sepd. The asphaltenes were removed while hot and the paraffin settled out in the cold and was removed from the soln. by filtration through a heated funnel. A. A. Boehlingk

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<i>BC</i> Production and refining of synthetic liquid fuel. A. VINOGRADOV, S. RUMIN, and V. BAKOVSKI (Trud. Torf. Inst., 1938, No. 16, 130—148).—Refining is easiest with the oils of tars from bituminous peats. For the neutral oils of primary tars of peat from the upper layers the necessary and sufficient amount of H_2SO_4 is 3—5%. Purification results are improved by presence of a small amount of phenols in the oil. If the oils contain >5% of bases, the latter may be removed by means of spent acid. The bases are then separated by dilution with H_2O, decantation, and neutralisation. CH. ABS. (c) <i>B-I-3</i>																			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST DIVISION										2ND DIVISION									
1ST ORDER										2ND ORDER									
1ST ORDER										2ND ORDER									

RUBIN, S. I.

Vypolnenie plana nefteperevozok - vazhneishaia zadachz vodnogo transporta. (Plan fulfilment for oil shipments is the main task of river transportation). (Vodnyi transport, 1938, no. 8, p. 4-5).

DLC: HE561.R8

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

RUBIN, S. I.

S. S. VOYUTSKI, DAN, Vol. 73, No. 2, 307-10

RUBIN, Semen Moiseyevich, agronom; BICHUTSKIY, Georgiy Samoylovich, agronom; BRAKENGEMER, Rostislav Petrovich, kand.sel'khoz. nauk; ZAGORSKIY, G., red.; POKHLEBKIN, M., tekhn. red.

[Hydraulic mechanization in plant growing]Gidromekhanizatsia v rastenievodstve. Moskva, Mosk. rabochii, 1962. 26 p.
(MIRA 15:11)

(Fertilizers and manures) (Boring machinery)
(Irrigation)

RUBIN, S.M.

KOVUN, P.K.; NEVZOROV, A.P.; ANTONENKO, G.P.; BUDINA, L.V.; VORONINA, Ye.P.; GUSEV, P.I.; YELAGIN, M.N.; ZHURAVLEV, M.A.; ZALOZNYI, K.D.; KOMKOV, V.N.; KOROBOV, A.S.; KORCHAGIN, V.N.; LAVROV, V.N.; LAPSHINA, O.V.; LUTIKOV, I.Ye.; MAKEVNIN, A.Ya.; MOROZOVA, F.I.; NEVZOROV, A.P.; PONOMARCHUK, M.K.; PUCHKOV, A.M.; RAZMOLOGOVA, A.M.; RUBIN, S.M.; SELEZNEVA, O.V.; SEMENOVA, F.I.; SPIRIDONOVA, A.I.; SUSHCHEVSKIY, M.G.; USOV, M.P.; TARKOVSKIY, M.I.; CHENYKAYEVA, Ye.A.; SHENDRIKOV, G.L.; SHUL'GIN, G.T.; TSITSIN, N.V., akademik, redaktor; REVENKOVA, A.I., redaktor; KHOKHRINA, N.M., khudozhestvennyy redaktor; VESKOVA, Ye.I., tekhnicheskiiy redaktor; PEVZNER, B.I., tekhnicheskiiy redaktor.

[Plant breeding at the 1955 All-Union Agriculture Exhibition] Rasteni-
vodstvo na Vsesoiuznoi sel'skokhoziaistvennoi vystavke 1955 goda. Moskva,
Gos.izd-vo sel'khoz.lit-ry, 1956. 687 p. (MIRA 10:4)
(Moscow--Plant breeding--Exhibitions)

RECH, S. K.

33338. Mastera Vysokikh Urozhayev. (K Prisvojeniyu Peredovikan Vinogradarstva
Evaniya Geroya Sots. Truda). Vinodeliye I Vinogradarstvo SSSR, 1949, No. 10, C. 5-7

SO: Letopis' Zhurnal'nykh Statey Vol. 45, Moskva, 1949

RUBIN, S. M.

Agriculture

(Viticulture manual) Moskva, Gos.
izd-vo selkhoz lit-ry, 1950.

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

RUBIN, S. M.

Agriculture

Grapes in northern districts of the U.S.S.R.,
Moskovskii rabochii, 1950

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

1ST AND 2ND ORDERS										PRECEDENCE AND PRIORITY INDEX										3RD AND 4TH ORDERS									
BC B3 1 Increasing planting material for vineyards. S. M. Rubin (Sov. Ogorod, 1948, No. 8, 70-78; Hort. Abstr., 1949, 44, 30).--Rapid methods of propagation are described which are suitable for the large scale production of vine plants. Grafting of scions of 1 foot length on 1-year-old, well-developed root stocks, and "kil" (soilage), the method of planting to induce rooting in vine cuttings, are among the methods described. C. B. NORTH																													
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION 33001 STR-0110 3-2-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30																													
SEARCHED										SERIALIZED										INDEXED									
11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30										21-22-23-24-25-26-27-28-29-30										31-32-33-34-35-36-37-38-39-40									

RUBIN, S.M., agronom; BICHUTSKIY, G.S., agronom

Irrigation and fertilizer application with the help of hydraulic
drills are the basis for increased crop yields. Zemledelie 24
no.2:80-82 F '62. (MIRA 15:3)
(Irrigation) (Fertilizer spreaders)

RUBIN, S. M.

For extensive introduction of hydraulic machinery in agriculture.
Zemledelie 8 no.10:74-75 0 '60. (MIRA 13:10)

1. Laboratoriya gidromekhanizatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta mekhanizatsii sel'skogo khozyaystva.
(Agricultural machinery--Hydraulic equipment)

ZHURIN, Aleksey Borisovich; RUBIN, Semen Moiseyevich; TAIROVA, V. N.,
redaktor; BALLOD, A.I., tekhnicheskij redaktor.

[Viticulture manual] Posobie po vinogradarstvu; Izd.2-oe, ispr. 1
dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1956. 229 p.

(MLRA 10:6)

(Viticulture)

The effectiveness of Solikamsk sylvite in the cultivation of fruit and berry plants... S. S. Rubin and P. N. Kalashnik. *Kadm* (U. S. S. R.) 5, No. 8, 29-30(1930); *Chem. Zvez.* 1937, II, 2247.—Moderate doses of sylvite are beneficial for the growing of apple trees and other kinds of fruit. The action corresponded to 40% K salt and was superior to that of K_2SO_4 and KCl . The superior effect was due to the NaCl content. The effect was beneficial only for sylvite doses up to 1 g. K_2O to 12 g. soil. The sylvite had no effect on the P_2O_5 and ash contents of the apple tree leaves.
M. G. Moore

LIST AND (NO ORDER)		PROCESSES AND PROPERTIES INDEX		JED AND JTH ORDER	
<i>Ca</i> The dynamics and character of the intake of nutrients by fruit trees. P. A. Vlasjuk, S. S. Rubin, N. I. Musich and N. M. Shkvaruk. <i>Chemical Abstracts</i> (U.S. S. R.) 1936, No. 7-R, 71-6 (in English 77).—The anion intake is greater than that of cations in the case of apples and pears. Of the anions NO_3 is taken up very energetically by apples; of the cations K and Ca and partly NH_4 are taken up in preference to others. Mg and NH_4 are taken up more readily in the late stages of growth. Wild Ca and P are taken up in the late stages of growth. Wild cherry stock behaved like the apple, except that more K and Ca were taken up. The Mg, NH_4, and SO_4 were taken up uniformly throughout the growing season. The intake of nutrients by wild strawberries (<i>F. vesca</i> L.) differs somewhat. The K intake decreases with the maturity of the fruit. P and NO_3 were uniformly taken up by the plants. J. S. Josse					
ASH-51A METALLURGICAL LITERATURE CLASSIFICATION					
FROM SOURCE					
RELIST ONE ONLY					

11 AND 12H 22113 122 AND 12H 22000		11 AND 12H 22113 122 AND 12H 22000	
PROCESSING AND PROPERTY INDEX			
BC B-3-1 Fertilisation of vegetable plants with potash. S. S. Rubin (Kali, 1937, 6, No. 5-6, 40-44).--Experiments with tomatoes, cabbages, and cucumbers are described. Optimum yields of tomatoes are obtained when the K is added during two periods, viz., when flowering commences and before the fruit is picked, the yield being almost doubled compared with results obtained when the full dose is added before planting. Ripening is accelerated and the quality of the fruit improved. With cabbages, the fertiliser should be added when the heart begins to be formed. Pot experiments with cucumbers show a 26.9% increase in yield due to K. D. G.		COMPOUND VARIATION INDEX	
ASS. SEA METALLURGICAL LITERATURE CLASSIFICATION		FROM SOURCE	
SECOND STAGE INDEX		SECOND STAGE INDEX	
SECOND STAGE INDEX		SECOND STAGE INDEX	

RUBIN, S. S.

Chair Agrochem., Umanskogo Agric. Inst. (-1946-)

"Concentration on Soluble substances near the Sucking Roots of Fruit Trees"

Pochvovedeniye, No. 2, 1946.

[illegible]

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

RUBIN, S. S. Prof., POPOVA, N. YE
DANILEVSKIY, A. F., KORZUNETSKAYA, N.K.

Grasses

Influence of herbaceous vegetation and its root secretions on the growth of trees.
Les. Khoz. No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

RUBIN, S. S.

RUBIN, S. S.

Soil Conservation

Method for conservation of soil in gardens. Sad i og. no. 5, 1952

Monthly List of Russian Accessions, Library of Congress, July 1952. UNCLASSIFIED.

RUBIN, S. S.

Composition of garden soils. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954. 511p.

RUBIN, S.S.

AG
Comparative effectiveness of different systems of fertilizing. S. S. Rubin. *Sadovodstvo, Vinogradarstvo i Vinodelie* Mskvsk 10, No. 5, 29-30 (1955).—Expts. conducted for 10 years (1945-1954) revealed that the best systems for fertilizing apple trees are org. (humus-type) manure and $\frac{1}{2}$ inorg. and $\frac{1}{2}$ org. instead of inorg. NPK-fertilizing alone. Org. and org.-NPK fertilizations increased the amts. of sol. carbohydrates in the growing sprouts and the amt. of nitrates in the soil, particularly in the lower (40-60 cm.) soil horizons (org. manure 77.3, org.-NPK 64.5, and control (no fertilizing) 26.8 mg. nitrate/kg. abs. dry soil). Nonroot fertilizing of fruit trees. *Ibid.* 30.—Nonroot fertilizing of fruit trees during the vegetative growth is very effective, particularly by spraying the trees with 5% aq. solns. of full NPK fertilizers; less effective is a direct administration of the solid fertilizers under the bark or into the leaves of the plants. N, K, and P increased the amt. of flowers on apple trees and consequently the yield. Spraying of the vine with 2, 3, and 5% solns. of superphosphate in combination with 0.5% KCl greatly increased the sugar content of the grapes and the amt. of dry substance in the vegetative organs. B. Wierbicki.

SPIVAK, M.S., glavnyy redaktor; BILOZUB, V.G., redaktor; VASILENKO, P.M., redaktor; ZORIN, I.G., redaktor; IL'CHENKO, I.K., redaktor; KOVAL', O.G., redaktor; KRILOV, O.F., redaktor; PUKHAL'S'KIY, A.V., redaktor; SIDORENKO, O.P., redaktor; FEDCHENKO, O.N., redaktor; ANGELINA, P.M., redaktor; BUZANOV, I.F., redaktor; BOYKO, D.V., redaktor; BURKATS'KA, G.E., redaktor; VASILENKO, A.O., redaktor; VIASYUK, P.A., redaktor; GORODNIY, M.G., redaktor; DEMIDENKO, T.T., redaktor; DUBKOVETS'KIY, F.I., redaktor; KIRICHENKO, F.G., redaktor; LITOVCHENKO, G.P., redaktor; OZERNIY, M.O., redaktor; PERSHIN, P.M., redaktor; POPOV, F.A., redaktor; POSMITNIY, M.O., redaktor; PSHENICHNIY, P.D., redaktor; RADCHENKO, B.P., redaktor; POMANENKO, S.S., redaktor; RUBIN, S.S., redaktor; SAVCHENKO, M.Kh., redaktor; SOKOLOVS'KIY, O.N., redaktor; TSIBENKO, K.O., redaktor; SHCHERBINA, O.P., redaktor; KRAVCHENKO, M.F., tekhnichnyy redaktor

[Collective farm encyclopedia] Kolhospna vyrobnycha ensyklopediia. Vyd. 2-e, perer. i dop. Kyiv, Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSR. Vol.1. Abrykos - Liutserna. 1956. 756 p. (MIRA 9:9)
(Agriculture--Encyclopedias and dictionaries)

RUBIN, S.S., prof.; GORDIYENKO, V.P.

Plowing depth after perennial grasses. Zemledelie 27 no.7:
50-53 J1 '65. (MIRA 18:7)

1. Umanskiy sel'skokhozyaystvennyy institut.

RUBIN, S.S., zasluzhennyy deyatel' nauki UkrSSR; KARASYUK, I.M.; KUCHERENKO,
A.P., aspirant

Short-time fallowing. Zemledelie 26 no.7:29-31 J1 '64. (MIRA 18:7)

1. Umanskiy sel'skokhozyaystvennyy institut.

RUBIN, S.S.; MOYSEYCHL KO, V.F.

Distribution of nutrients in fruit plants in the case of isolated nutrition of a single root. Dokl. AN SSSR 152 no.2:485-488 S '63.
(MIRA 16:11)

1. Predstavleno akademikom A.L. Kursanovym.

RUBIN, S.S.; DAILEVSKIY, A.F.; IL'CHENKO, V.A.; KARASYUK, I.M.

Methods of studying the root systems of agricultural plants.

Bot. zhur. 47 no.8:1176-1184 Ag '62.

(MIRA 15:10)

1. Uman'skiy sel'skokhozyaystvennyy institut imeni A.M. Gor'kogo.

RUBIN, Simon Samoylovich, prof.; OZERANSKIY, L.A. [Ozerans'kyi, L.A.],
red.; CHEREVATSKIY, S.A. [Cherevats'kyi, S.A.], tekhn. red.

[Fertilizers for fruits and berries] Udobrennia plodovykh i
iahidnykh kul'tur. Kyiv, Derzhsil'hospvydav, URSR, 1962. 547 p.
(MIRA 16:5)

(Fruit--Fertilizers and manures)

(Berries--Fertilizers and manures)

RUBIN, S.S.
25755

O Glubine ObraBotki Pochvy V Dadakh (S. Primeured.)
Sad 1 Ogorod, 1948, No 7, S. 8-10

SO: LETOPIS NO. 30, 1948

Country : USSR
Category : CULTIVATED PLANTS, FRUITS. Berries.
Abs. Jour. : REF ZHUR-BIOL., 21, 1958, NO-96105
Author : Rubin, S.S.; Danilevskaya, O.M.
Institute : ~~_____~~
Title : Determination of the Leaf Area of Fruit Trees
Orig. Pub. : Botan. zh., 1957, 42, No.5, 728-730

Abstract : A detailed description is given of a method using coefficients for the determination of the assimilation surface of fruit trees, by means of which it is possible to study the dynamics of leaf growth without their removal from the plant. To determine the leaf surface of a tree of a given variety it is necessary to multiply the product of the average leaf size (average length X average width) by their number on the tree and by the coefficient of the variety. The coefficient is

Card:

1/3

Country :
Category : CULTIVATED PLANTS. FRUITS. Berries.

Abs. Jour. : REF ZHUR-BIOL., 21, 1952, NO-96105

Author :
Institute :
Title :

Orig. Pub. :

Abstract : computed according to the formula $La/Ra = K = \text{const}$. The leaf area (La) corresponds to the area of its shape, determined by plotting it on millimetric graph paper and then counting up the squares. The rectangular area (Ra) is then calculated, the rectangle's sides being equal to length (L) and width (W) of a given leaf. To figure the coefficients 100 leaves typical of the variety are measured. The average factor among these serves for sufficient accuracy in the computations.

Card:

2/3

130

Country	: USSR	M
Category	: CULTIVATED PLANTS, FRUITS, Berries.	--
Abs. Jour.	: REF ZHUR-BIOL., 21, 1968, NO 96121	
Author	: Rabin, S.S.; Andriyenko, A.S.	
Title	: Better Soil Conditioning in Fruit Orchards	
Orig. Pub.	: Sadovodstvo, vinogradarstvo i vinodeliye, Moldavi, 1957, No. 6, 19-22	
Abstract	: A study has been made at Uman' Agricultural Institute ever since 1931 on the effectiveness of various systems of keeping the soil in an apple orchard (Pepinka Litovskaya grafted on a forest variety). The trees grow and bear fruit best when the rows between them are kept fallow and when one combines fallow tillage in the first half of summer with the planting of summer siderate crops (peas, buckwheat, mustard, etc.) during the latter half of summer and plowing these in during autumn of the following year. Intercropping	
Card:	1/2	

RUBIN, Simon Samoylovich, prof.; SAVZDARG, V.E., red.; BALLOD, A.I.,
tekh. red.

[Fertilizer for fruit trees and berry plants] Udobrenie plodovykh
i iagodnykh kul'tur. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1958.
556 p. (MIRA 12:4)

(Fruit--Fertilizers and manures)
(Berries--Fertilizers and manures)

Rubins S.S.

SPIVAK, M.S., glavnyy red.; BELOZUB, V.G., red.; VASILENKO, P.M., red.;
 ZORIN, I.G., red.; IL'CHENKO, I.K., red.; KOVAL', A.G., red.;
 KRYLOV, A.F., red.; PUKHAL'SKIY, A.V., red.; SIDORENKO, A.P.,
 red.; FEDCHENKO, A.N., red.; ANGELINA, P.N., red.; BUZANOV, I.P.,
 red.; BOYKO, D.V., red.; BURKATSKAYA, G.Ye., red.; VASILENKO, A.A.,
 red.; VLASYUK, P.A., red.; GORODNIY, N.G., red.; DEMIDENKO, T.T.,
 red.; DUBKOVETSKIY, F.I., red.; KIRICHENKO, F.G., red.; LITOVCHENKO,
 G.P., red.; OZERNYY, M.Ye., red.; PERSHIN, P.N., red.; POPOV, F.A.,
 red.; POSMITNYY, M.A., red.; PSHENICHNYY, P.D., red.; RADCHENKO,
 B.P., red.; ROMANENKO, I.N., red.; RUBIN, S.S., red.; SAVCHENKO,
 M.Kh., red.; SOKOLOVSKIY, A.N., red.; TSYBENKO, K.Ye., red.;
 KOVAL'SKIY, V.F., tekhn.red.

[Practical collective farm encyclopedia] Kolkhoznaya proizvodstven-
 naya entsiklopediya. Izd. 2-oe, perer. i dop. Kiev, Gos. izd-vo
 sel'khoz. lit-ry USSR. Vol.2. Malina-Iashchur. 1957. 923 p.
 (Agriculture--Dictionaries) (MIRA 11:4)

RUBIN, S. S.

3-5-35/38

AUTHOR: Rubin, S.S. Professor, Doctor of Agricultural Sciences
 TITLE: About the Manual "Agriculture" (Ob uchebnike "Zemledeliye")
 PERIODICAL: Vestnik vysshey shkoly, 1957, Nr 5, pp 90-93 (USSR)

ABSTRACT: The author states his opinion of an agricultural manual called "Zemledeliye" (Agriculture) by A.A. Verbin, A. N. Klechetov, V. V. Kvasnikov, M. G. Chizhevskiy, issued in 1956, by Sel'khozgiz.

He says that it will certainly improve the theoretical and practical training of agricultural specialists, as it meets the requirements of the program of general agriculture. The theoretical level of this work is a very high one and reflects the latest experiences of Soviet and world scientists in the field. There are very good original illustrations. The author states that in this book much material has been gathered and analyzed, in particular, on the structure and water regime of soil, weeds, and the possibility of creating a deep ploughing layer. There are, however, some sections, which the author does not approve. He also criticises the title which should have been "General Agriculture" instead of

Card 1/2

About the Manual "Agriculture"

3-5-35/38

"Agriculture". Some recommendations stated in the book are not founded but in general. The critic says, the manual can be considered valuable and modern, and certainly will be a great help in the agricultural VUZes.

ASSOCIATION: The Uman' Institute of Agriculture (Umanskiy sel'skokhozyaystvennyy institut)

AVAILABLE: Library of Congress

Card 2/2

RUBIN, S.S.

USSR/Cultivated Plants - Fruits. Berries.

L-6

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69353

Author : Rubin, S.S.

Inst :

Title : Fertilization of Orchards.

Orig Pub : Kolhospnik Ukraini, 1956, No 10, 30-32

Abst : No abstract.

Card 1/1

RUBIN, S.S.

M-5

USSR/Cultivated Plants - Fruits and Berries.

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10977

Author : Rubin, S.S.

Inst : Uman Agricultural Institute.

Title : Restoration of Damaged Roots of Fruit Trees.

Orig Pub : Dopovidi AN USSR, 1957, No 1, 71-74

Abstract : Experiments conducted in the Uman Agricultural Institute have determined that fruit tree roots which have been damaged by soil cultivation machinery grow back easily under favorable air-water and nutritive regimes. The roots of apple trees start growing back in 30-50 days. Application of fertilizers, proper aeration, and soil moisture all stimulate root restoration. Apple roots which had been cut off developed a total of 144 cm.

Card 1/2

7

SPIVAK, M.S., glavnyy redaktor; BELOZUB, V.G., redaktor; VASILENKO, P.M., redaktor; ZORIN, I.G., redaktor; IL'CHENKO, I.K., redaktor; KOVAL', A.G., redaktor; KRYLOV, A.F., redaktor; PUKHAL'SKIY, A.V., redaktor; SIDOROV, A.P., redaktor; FEDCHENKO, A.N., redaktor; ANGELINA, P.N., redaktor; BUZANOV, I.F., redaktor; BOYKO, D.V., redaktor; BURKATSKAYA, G.Ye., redaktor; VASILENKO, A.A., redaktor; VLASYUK, P.A., redaktor; GORODNIY, N.G., redaktor; DEMIDENKO, T.T., redaktor; DUBKOVETSKIY, F.I., redaktor; KIRICHENKO, F.G., redaktor; LITOVCHENKO, G.P., redaktor; OZERNYY, M.Ye., redaktor; PERSHIN, P.N., redaktor; POPOV, F.A., redaktor; POSHITNYY, M.A., redaktor; PSHENICHNYY, P.D., redaktor; RADCHENKO, B.P., redaktor; ROMANENKO, I.N., redaktor; RUBIN, S.S., redaktor; SAVCHENKO, M.Kh., redaktor; SOKOLOVSKIY, A.N., redaktor; TSYBENKO, K.Ye., redaktor; KOVAL'SKIY, V.F., tekhnicheskii redaktor

[Practical collective farm encyclopedia] Kol'khoznaia proizvodstvennaia entsiklopediia. Izd. 2-oe, ispr. i dop. Kiev, Gos. izd-vo sel'khoz. lit-ry USSR. Vol. 1. Abrikos - liutserna. 1956. 688 p. (MLRA 10:9)
(Agriculture--Dictionaries)

RUBIN, S.S.; DANILEVSKAYA, O.M.

Determining the surface area of fruit tree leaves. Bot. zhur. 42 no.5:
728-730 My '57. (MLRA 10:6)

1. Sel'skokhozyaystvennyy institut, Uman'.
(Leaves) (Fruit trees)

RUBIN, S.S.

Regeneration of injured roots of fruit trees. [with summary in English]
Dop. AN URSR no.1:71-74 '57. (MLRA 10:4)

1. Predstaviv akademik AN URSR P. A. Vlasynk.
(Roots (Botany))

KAZANETS, I.; KUNAYEV, D.; SHUMAUSKAS, M. [Sumauskas, M.];
KOCHINYAN, A.; SADYKHOV, R.; RUBIN, V.; KURBANOV, R.

The entire country participates in foreign trade. Vnesh.
torg. 43 no.1:6-12 '64. (MIRA 17:2)

1. Predsedatel' Soveta Ministrov UkrSSR (for Kazanets).
2. Predsedatel' Soveta Ministrov KazSSR (for Kunayev).
3. Predsedatel' Soveta Ministrov Litovskoy SSR (for Shumauskas).
4. Predsedatel' Soveta Ministrov ArmSSR (for Kochinyan).
5. Zamestitel' Predsedatelya Soveta Ministrov AzerSSR (for Sadykhov).
6. Predsedatel' Soveta Ministrov Latviyskoy SSR (for Rubin).
7. Predsedatel' Soveta Ministrov Uzbekskoy SSR (for Kurbanov).

RUBIN, V. A.

"O narodnom sobranii v drevnikh gosudarstvakh Vostochnoy Azii."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-10 Aug 64.

RUBIN, V.B., inzh.

Dynamics of the regulation of turbogenerators with intermediate
stream superheating. Teploenergetika 7 no.6:27-36 Je '60.
(MIRA 13:8)

1. Vsesoyuznyy teplotekhnicheskii institut.
(Turbogenerators)

RUBIN, V.B., inzh.

Regulating the capacity of the once-through boiler-turbine unit.
Teploenergetika 9 no.3:3-9 Mr '62. (MIRA 15:2)

1. Vsesoyuznyy teplotekhnicheskii institut.
(Electric power plants--Equipment and supplies)
(Governors (Machinery))

GAL'PERIN, Iosif Iosifovich; RUBIN, V.B., red.

[Automatic control unilateral mechanics] Avtomatika kak
odnostoronniiaia mekhanika. Moskva, Izd-vo "Energiia,"
1964. 262 p. (MIRA 17:7)

RUBIN, V.B., kand. tekhn. nauk; KUZ'MIN, G.I., inzh.

Calculation of the dynamics of the steam channel of a boiler and turbine unit. Teploenergetika 11 no.8:8-13 Ag '64. (MIRA 18:7)

1. Vsesoyuznyy teplotekhnicheskii institut.

KUZ'MIN, G.I., inzh.; PANFILOV, V.A., inzh.; RUBIN, V.B., kand.tekhn.nauk

Regulation of the power of large turbogenerators. Elek. sta.
36 no.2:35-39 F '65. (MIRA 18:4)

1. DEMIDOV, L. G., KAMINSKIY, V. S., KORSHUNOV, V. I., RUBIN, V. E.
2. USSR (600)
4. Coal Preparation
7. Examining the precipitation process of the solid phase of coal water suspension by the method of centrifugal settling, 'Ugol' 28, no. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Unclassified.

DEMIDOV, L.G.; KAMINSKIY, V.S.; KORSHUNOV, V.I.; RUBIN, V.E.

Investigation of the sedimentation process of the solid phase of coal
in water suspensions by means of sedimentation centrifuging. Ugol' 28,
No.3, 41-4 '53. (MLRA 6:2)
(CA 47 no.14:7190 '53)

RUBIN, V.F.; VITANOV, D.R.

[Cabbage]Kapusta. Kyiv, Derzh.vyd-vo sil's'kohospodars'koi
lit-ry URSR, 1961. 91 p. (MIRA 15:10)
(Cabbage)

RUBIN, V.F., kand. sel'khoz. nauk, red.; MILOKOSTA, N.ya., red.;
NEMCHENKO, I.Yu., tekhn. red.

[Advanced methods in vegetable growing] Peredovi metody vyro-
shchuvannia ovochiv. Kyiv, Derzhsil'hospvydav URSR, 1961. 178 p.
(MIRA 15:7)

(Ukraine--Vegetable gardening)

Handwritten: MITINA, V.S.; RUBIN, V.I.

Phosphoric acid in the S and R forms of certain species of bacteria.
Zhur-mikrobiol. spid. i immun. 26 no.7:150-151 J1 '57. (MIRA 10:10)

1. Iz Saratovskogo meditsinskogo instituta.
(BACTERIA (PHOSPHORIC ACID))

SOLUN, N.S.; RUBIN, V.I.

Organization of laboratory work in Saratov Province. Lab. delo 8
no.3:62 Mr '62. (MIRA 15:5)
(SARATOV PROVINCE--MEDICAL LABORATORIES)

RUBIN, V.I.

Approximation analysis of results of current and magnetic field
interaction in aluminum electrolyzers. TSvet. met. 31 no.8:53-56
Ag '58. (MIRA 11:9)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Aluminum--Electrometallurgy) (Magnetic fields)

MITINA, V.S.; RUBIN, V.I.

Differentiation of dissociants of *Sarcina lutea* by carbohydrate composition. Trudy Sar. gos. med. inst. 26:260-264 '59.
(MIRA 14:2)

1. Saratovskiy meditsinskiy institut, kafedra biologicheskoy khimii (zav. - prof. N.I. Ivanovskiy).
(SARCINA LUTEA) (PAPER CHROMATOGRAPHY)

RUBIN, V.I. (Saratov)

Modern concepts of the nature of phagocytosis. Usp.sovr.biol.
46 no.3:301-321 N-D '58 (MIRA 11:12)
(PHAGOCYTOSIS)

ATAYEV, S.S., kand.tekhn.nauk; ZALOGO, V.F., inzh.; KOROBCHKIN, M.A.,
inzh.; PEVZNER, E.D., kand.tekhn.nauk; ROGOVIN, Ya.A., inzh.;
RAKUT', B.A., inzh.; RUBIN, V.I., inzh.; TIRKEL'TAUB, I.D.,
inzh.; FROLOV, N.P., kand.tekhn.nauk; YANKOVSKIY, I.P., inzh.;
MOROGOVSKIY, V.M., inzh., retsenzent; ZHIZHEL', I.M., inzh.,
red.; KAZACHEK, G.A., red.; GOLUBTSOVA, P., red.; STEPANOVA,
N., tekhn.red.

[Builder's handbook] Spravochnik mastera-stroitelia. Izd.4.,
perer. i dop. Minsk, Gos.izd-vo BSSR. Red.nauchno-tekhn.
lit-ry, 1959. 659 p. (MIRA 13:1)

1. White Russia. Ministerstvo gorodskogo i sel'skogo stroitel'-
stva.

(Building)

LIVSHITS, L.Ya.; RUBIN, V.I.

Determination of acetylcholine and similar substances in the spinal fluid. Lab. delo 7 no.3:15-17 Mr. '61. (MIRA 14:3)

1. Otdeleniye neyrokhirurgii (zav. Ye.I.Babichenko) i biokhimicheskaya laboratoriya (zav. V.I.Rubin) Saratovskogo nauchno-issledovatel'skogo instituta travmatologii i ortopedii.
(CHOLINE) (CEREBROSPINAL FLUID)

RUBIN, Vladimir Ivanovich

Activity (lipazy) of the Blood and Tissue Concerning Cancerous Diseases

Dissertation for candidate of a Medical Science degree. Chair of Biological Chemistry (head, Prof. N.N. Ivanovskiy) Saratov Medical Institute, 1952

RUBIN, N. I.

The relative content of amino acids of S and R forms of intestinal rods. V. S. Mitina and V. I. Rubin (Med. Inst. Saratov). *Zhur. Mikrobiol., Epidemiol. i Immunobiol.* 1955, No. 5, 105-0. — The hydrolyzates of S and R forms of intestinal rods (24 hrs. in 25% H₂SO₄ at 120°) were analyzed chromatographically. The S form of the rods contained aspartic and glutamic acids, glycine, lysine, alanine, serine, threonine, phenylalanine, proline, valine, tyrosine, arginine, leucine, and cystine. The R form did not contain cystine.

J. A. Stekol

Chem Biochemistry

CZECHOSLOVAKIA

GORKOVA, A.V., MD, director of the Pathophysiological Laboratory;
RUBIN, V. I., MD, Candidate of Sciences, director of the Bio-
chemical Laboratory; BABICHENKO, E.I., MD, Candidate of Sciences,
director of the Clinic of Neurosurgery. Research Institute of
Traumatology and Orthopedics, Docent Dr I.M. RODIN, director,
Saratov, USSR.

"Functional State of the Endocrinal System During Spine In-
juries"

Prague, Casopis Lekaru Ceskych, Vol CII, No 24, 14 June 63,
pp 663-666.

Abstract: A total of 56 patients were investigated. Injuries
were localized as follows: neck spine -11, chest spine - 24,
loin spine - 18, and 3 injuries of conus medullaris and cauda
equina. Functioning of the thyroid gland was examined in 32
cases. Results of examinations showed a substantial reduction
in the percentage of intercepting I^{131} by the thyroid gland in
22 cases, in the rest the percentage remained at the level of
the lower normal limit. The interception speed was also re-
duced. The number of eosinophiles was conspicuously low. It
seems that reduction of activities is connected with phenomena
concerning central and reflexion dampening in the higher portions
of the central nervous system. Reduced hormonal activity may
be a manifestation of the adjustment of post-injury mechanisms.

GORKOVA, A.V.; RUBIN, V.J.; BABICENKO, E.I.

Functional state of the endocrine glands following spinal cord injuries. Cas. lek. cesk. 102 no.24:663-666 14 Je '63.

1. Klinika neurochirurgie, prednosta MUDr. E.I. Babichenko,
CSc., Biochemicka laborator, prednosta MUDr. V.J. Rubin,
CSc., Patofyziologicka laborator, prednosta MUDr. A.V. Gorkova,
CSc., Vyzkumny ustav traumatologie a ortopedie, reditel doc.
dr. J.N. Rodin, Saratov.

(SPINAL CORD INJURIES)
(RADIOIODINE ISOTOPES, DIAGNOSTIC)
(THYROID FUNCTION TESTS)
(ADRENAL CORTEX FUNCTION TESTS)
(PITUITARY GLAND)

KOSTENKO, P.G.; RUBIN, V.M.

Sudden death of a four-year old girl from a brain tumor. Sud.med.
ekspert. 2 no.4:50-52 O-D '59. (MIRA 13:5)

1. Vinnitskoye byuro oblastnoy sudebnomeditsinskoy ekspertizy
(nachal'nik - kad.med.nauk A.I. Mukhanov).
(BRAIN--TUMORS)

RUBIN, Ya.I., inzh.

Readers' conference in Minsk. Svar.proizv. no.4:44-45 Ap '62.
(Welding--Periodicals) (MIRA 15:3)

RUBIN, Ye.A.

Seventieth birthday of Arkadii Semenovich Okanenko, 1894- .
Fiziol. rast. 11 no.4:75'-758 J1-Ag '64. (MIRA 17:11)

RUBIN, Ye.M.

Equipment for mechanical painting of premises. Sbor. rats.
predl. vnedr. v proizv. no.2:69-70 '61. (MIRA 14:7)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Painting, Industrial)

L 38909-66 EWT(m)/T/ENP(t)/ETI/ENP(k) IJP(c) JD/HW

ACC NR: AP6019769

SOURCE CODE: UR/0370/66/000/003/0125/0129 39

AUTHOR: Kishkin, S. T. (Moscow); Glazunov, S. G. (Moscow); Khorev, A. I. (Moscow); Rubin, Yu. L. (Moscow); Shilina, E. M. (Moscow) 8

ORG: none

TITLE: The use of high-temperature thermomechanical treatment in the manufacture of extruded BT-15 titanium alloy tubes 18

SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1966, 125-129

TOPIC TAGS: titanium alloy, alloy tube, tube heat treatment, thermomechanical treatment, high temperature treatment, aluminum containing alloy, chromium containing alloy/VT15 alloy

ABSTRACT: Vacuum-arc melted ingots of VT15 titanium-base alloy (2.99—3.05% Al, 10.7—11.1% Cr) were conditioned by machining and extruded into bars 187 mm in diameter. The bars were cut into tube billets which were pierced, conditioned and extruded at 950—1150C into tubes with an outside diameter of 110 mm and a wall thickness of 10 mm. Part of the extruded tubes were air cooled and then subjected to conventional heat treatment (annealing at 800C followed by water quenching); another part was subjected to high temperature thermomechanical treatment (HTMT), i.e., were water quenched immediately after extrusion. Both tube lots were then

Card 1/1

UDC: 669.295.5-157.9

L 38909-66

ACC NR: AP6019769

double aged at 450C for 25 or 50 hr and at 560C for 15 min. The tubes which underwent HTMT had considerably better mechanical properties, tensile strength of 136—148 kg/mm², elongation of 6—12%, and reduction of area of 12—24% than the conventionally heat treated tubes, tensile strength of 116—132 kg/mm², elongation of 1—6% and reduction of area 2—12%. The beneficial effect of HTMT is believed to be associated with improved properties of grain boundaries, the rapid cooling immediately after extrusion prevents the diffusion of impurities to grain boundaries. Also the α -phase particles precipitated during aging in alloy subjected to HTMT are much finer and more uniformly distributed than those in conventionally heat treated alloy. Orig. art. has: 2 figures and 1 table. [DV]

SUB CODE: 13, 11/ SUBM DATE: none

Card 2/2 *MB*

ACC NR: AP6036712

SOURCE CODE: UR/0136/66/000/011/0089/0091

AUTHOR: Grishkovets, Ya. G.; Rubin, Yu. L.

ORG: none

TITLE: Effect of ingot cooling rate following homogenizing on the quality of D16-alloy (Al-Cu-Mg) tubes

SOURCE: Tsvetnyye metally, no. 11, 1966, 89-91

TOPIC TAGS: aluminum base alloy, homogenization, ^{metal}heat treatment, cooling rate, phase composition, ^{solid}mechanical property / D16 Al-Cu-Mg alloy

ABSTRACT: The cooling rate of ingots following their homogenizing is an important aspect of their heat treatment prior to pressworking. In this connection, the authors experimentally performed the homogenizing of ingots of D16 alloy (diameter 160x63 mm) at 500°C at 12 hr and their subsequent cooling to 300°C at the rate of 5, 20, 50 and 100°C/hr as well as by means of water quenching (~100°C/min). The technological properties of the thus treated ingots were evaluated by means of short-time tensile tests at high temperatures. Mechanical tests were performed at 320, 360, 400 and 440°C. Tubes measuring 60x10 and 68x5.5 mm were produced

UDC: 669.715:620.1

Card 1/3

ACC NR: AP6036712

by pressworking the ingots heated to 360°C, with concomitant oscillographic and dynamometric measurements of flowage rate. Findings: The effect of cooling rate on the mechanical properties of the ingots decreases with increase in test temperature (Fig. 1). The sharpest

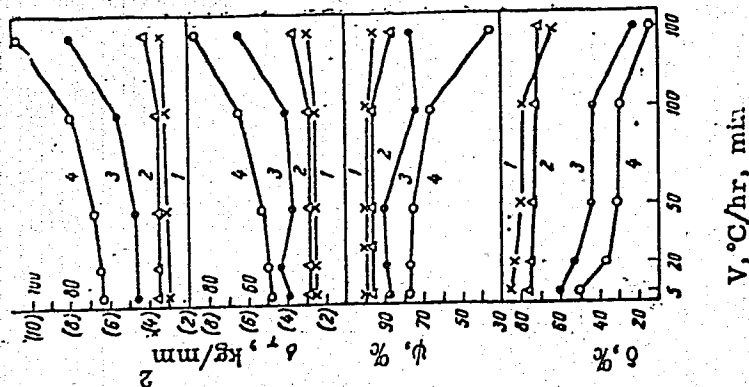


Fig. 1. Mechanical properties of ingots as a function of cooling rate following homogenizing. Tests performed at the following temperatures: 1 - 440°C; 2 - 400°C; 3 - 360°C; 4 - 320°C.

Card- 2/3

ACC NR: AP6036712

decrease in plasticity characteristics and increase in strength characteristics occurs at 320°C for ingots cooled at the rate of 100°C/min and 100°C/hr, whereas at 400 and 440°C there no longer exists any appreciable relationship between properties of the ingot and the rate of its cooling from homogenization temperature. Further, the flowage rate of tubes during their pressworking increases with decrease in cooling rate. Corrosion tests, based on the weight loss of specimens following their 15-day immersion in a solution of 3% NaCl + 0.1% H₂O₂, revealed that only the tubes obtained from ingots cooled at the rate of 5 and 20°C/min displayed proneness to intercrystalline corrosion. During homogenizing the boundary excess phases CuAl₂ and S dissolve in the Al solid solution and this is accompanied by the decomposition of the supersaturated -- during crystallization -- solid solution of Mn in Al. Cooling from the homogenizing temperature is accompanied by the segregation of the dissolved phases in the form of platelets whose size decreases with increase in cooling rate of the homogenized ingots; evidently it is these changes in phase dispersity that account for the improvement in pressworkability, and the decrease in mechanical properties and increase in corrosion proneness with decrease in cooling rate of homogenized ingots. Orig. art. has: 4 figures.

SUB CODE: 13, 11, 20/ SUBM DATE: none/ ORIG REF: 005

Card 3/3

3

L 5192-66 EWP(e)/EWT(m)/EFF(c)/EWP(i)/T/EWP(t)/EWP(b)/EWA(h) JD/WW/DJ/WH

ACC NR: AP5024999

SOURCE CODE: UR/0286/65/000/016/0062/0062

AUTHORS: Uvarov, V. Ya.; Glebov, Yu. P.; Zhuravlev, F. V.; Iermanok, M. Z.;
Rubin, Yu. L.; Zakharov, M. F.; Kochnova, G. P.; Sukhanova, M. P.

53
B

ORG: none

TITLE: Lubricant for heat treatment of metals. Class 23, No. 173869 [announced
by the Organization of Mosgorsovnarkhoz (Organizatsiya mosgorsovnarkhoza)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 62

TOPIC TAGS: lubricant, metal heat treatment, mineral oil

ABSTRACT: This Author Certificate presents a mineral oil and graphite lubricant
for heat treatment of metals. To prevent metals from sticking to the instrument,
talcum and red lead are added to the lubricant. The talcum constitutes 10% by
weight of the additive, and the red lead constitutes 8-25% by weight.

SUB CODE: FP/

SUBM DATE: 06Jul64

Card 1/1

UDC: 665.5

09010763

LEVITSKIY, P.A.; RUBIN, Z.A., kandidat tekhnicheskikh nauk, dotsent, redaktor; LEUTA, V.I., inzhener, redaktor; LYKHOTA, M.A., tekhnicheskiiy redaktor

[Organization of rhythmic work in a machine building plant] Organizatsiia ritmichnoi raboty mashinostroitel'nogo zavoda. Kiev, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, Ukrainskoe otd-nie, 1955. 70 p. (MIRA 9:1)
(Machine-shop practice)

RUBIN, Z.A. [deceased]

Technical progress and creative engineering. Vop. 1st. est. 1
tekh. no.6:12-23 '59. (MIRA 12:6)
(Technology)

RUBIN, Z. A.

Assembly-Line Methods

Experience with rational planning of equipment in serial production machine-building.
Vest. mash. 33, No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

RUBIN, Z. A.

Machinery Industry

Experience with rational planning of equipment in serial production
machine-building, Vest. mash. 33, No. 2, 1953

Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

RUBINA, A.; GUROV, S., red.

[Technological progress in textile enterprises] Tekhnicheskii progress na tekstil'nykh predpriiatiakh.
Moskva, Mosk. rabochii, 1964. 137 p. (MIRA 17:8)

RUBINA, A.

The Communist Youth League and the Young People's Division
are building. Na stroi. Ros. 3 no. 8:18-19 Ag '62. (MIRA 15:12)
(Moscow—Apartment houses)
(Moscow—Communist Youth League)

10(4), 24(5)

SOV/98-59-9-8/29

AUTHOR: Gol'tsman, V.Kh., Rudakov, V.N. and Rubina, A.L.,
Engineers

TITLE: Determination of Vertical Reactions on Flexible Grounds

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 9,
pp 27-33 (USSR)

ABSTRACT: The authors consider conventional statistical methods for computation of reactive forces caused by pad foundation pressure as idealized. They try to bring some new ideas to this field of theoretical mechanics, using also preceeding works prepared by P.L. Pasternak (Ref 1), P.P. Laupman and V.S. Eristov, (Ref 2), by taking into account bending of the foundation and the plasticity and non-uniformity of the ground. Several formulas based on these principles are given. There are 3 graphs, 1 set of diagrams and 3 Soviet references.

Card 1/1

ZOTIEWA, S.S. [Zot'yeva, A.S.]; KALASZNIKOWA, M.I. [Kalashnikova, M.I.]
RUBINA, Je.E.; SULMIENIEWA, Je.M.

Nitrification method of increasing the strength of drive screws.
Przegl mech 23 no. 21:623-625 10 N '64.

1ST AND 2ND DEGREE		PROJECTS AND PROJECTING MOSES	
<i>Handwritten:</i> RUBINA, Kh.M.		<i>Handwritten:</i> 2	
Study of the conditions of ignition of gas mixtures. XVIII. Effect of convection on the rate of propagation of cold flame in an ether-air mixture. M. B. Neiman and Kh. M. Rubina (Inst. Chem. Phys., Acad. sci. U.S.S.R., Moscow). <i>J. Phys. Chem. (U.S.S.R.)</i> 22, 171-8(1948) (in Russian); <i>cf. C.A.</i> 37, 6184^o.—The rate v of horizontal propagation of flame in a mixt. of Et_2O with air (30% of the stoichiometric amt.) at 140° depends on the pressure p and the diam. d of the glass tube in which the flame moves, according to $v = a + b \log(p^2 d)$, a and b being const. The equation was verified for d ranging from 0.9 to 4.0 cm., for 200 to 700 mm. Hg. and for v from 5 to 20 cm./sec. It is valid also for other flames studied earlier (<i>cf. Coward and Hartwell, C.A.</i> 26, 5760). The consts. a and b depend on the temp., d, heat capacity, and heat cond. of the gas mixt. according to the Grashof criterion. However, they depend also on the kinetics of the reaction in the flame. Therefore, calcn. for v for another mixt. if that for $\text{Et}_2\text{O} + \text{air}$ is known, is impossible. The above equation ceases to be valid if d is greater than 5 cm. because then forced convection is added to the free convection. J. J. Bikerman			
ASR-3LA METALLURGICAL LITERATURE CLASSIFICATION			
FROM SYMBIOTIC		FROM BOWLING	
FROM SYMBIOTIC		FROM BOWLING	

MATERIALS INDEX		METALLURGICAL LITERATURE CLASSIFICATION	
The conditions of ignition of gas mixtures. XIX. The field of propagation of cold flames in mixtures of ethyl ether and air. M. B. Nefedov, Kh. M. Rubing, and R. B. Shol (U.S.S.R.), 22, 641-6(1948); cf. C.A. 42, 5315a. Cold flames of Et_2O-air mixt. (air excess coeff. α was 0.2) ignited at 200°, moved forward in a glass tube at 180°. If the pressure was above the P_{lim} of about 110 mm. Hg, independently of the direction of the tube. When the tube was vertical and the flame rose in it, P_{lim} increased but little when temp. decreased, e.g., to 250 mm. Hg at 20°. The increase of P_{lim} was steeper when the tube was horizontal, e.g., to 350 mm. Hg at 100°, and even steeper when the flame descended in a vertical tube, e.g., to 400 mm. at about 125°. In horizontal tubes, $\log P_{\text{lim}} = A + (1000/T)$, T being the absolute temp. and A a const. that decreases when the diam. d of the tube increases from 5 to 56 mm. In the following exps. the flame descended in a vertical tube, i.e. convection was unimportant. Increase of d from 28 to 40 mm. reduced P_{lim} but little. When α varied from 0.05 to 0.5, P_{lim} passed through a min. at $\alpha = 0.2$. At a given temp. P_{lim} is lower than the pressure at which Et_2O-air mixt. ignites; and at a given pressure, ignition takes place at a temp. (of the tube) about 50° above the min. temp. at which propagation of cold flame can occur. However, this does not prove that cold flame spreads because of a chain reaction (i.e., not because of heating) since the flame is hotter than the tube. When the tube temp. was 180°, the flame was 270° (measured with a thermocouple). XX. The fundamental rate of propagation of cold flames in mixtures of ethyl ether and air. J. J. Billewicz. The rate w (cm./sec.) of descent of cold flame in a vertical glass tube is only a few % greater than the "fundamental" rate of propagation i.e. in the complete absence of convection. Equation $w = A(DP)^{-1/2} \exp(1 + Bx - (4E/w^2))^{1/2}$ expresses the effect on w of gas pressure P (varied between 200 and 450 mm. Hg), temp. T (varied between 400° abs. and 440° abs.), the concn. x of Et_2O in air (up to 4.3 mm. Hg tested), and the concn. E of Et_2O or methylamine. The propagation ceased when the pressure of Et_2O reached 0.25 mm. that of MeNH_2 reached 0.42 mm. Hg. D is a diffusion coeff., and A, B, R, E, and A are const. When α varied from 0.03 to 0.5, w passed through a max. at $\alpha = 0.15$ (at 100°). Alteration of d between 28 and 40 mm. did not affect w. N_2 and especially CO_2 lower w. Cold flames of Et_2O spread both through chains and because of heat effects.		J. J. Billewicz	

L 27113-65 EWG(j)/EWT(1)/EWG(r)/FS(v)-3/EWG(v)/EWG(a)/EWG(c) Fe-5 DD

ACCESSION NR: AP5005387

S/0301/65/011/001/0027/0031

AUTHOR: Rubina, Kh. M.; Romanchuk, L. A.

TITLE: Glutathionereductase activity in the blood of normal and hypoxic rats

SOURCE: Voprosy meditsinskoy khimii, v. 11, no. 1, 1965, 27-31

TOPIC TAGS: hypoxia, hemodynamics, glutathionereductase, glutathione, hypoxia effect

ABSTRACT: White rats weighing 250 g were studied under conditions of normal respiration and acute hypoxia. Hypoxia was induced by 1 1/2 hours' "elevation" in a barochamber to a simulated altitude of 9700 m (ambient pressure, 200 mm Hg). Glutathionereductase activity was determined by measuring the amount of reduced glutathione accumulated in the following two consecutive reactions: 1) reduction of NADP by glucose-6-phosphate dehydrogenase; and 2) reduction of oxidized glutathione by the NADP formed in reaction (1). The reduced glutathione content was determined spectrophotometrically. Hypoxic rats were found to have statistically smaller amounts of reduced glutathione per 1 ml of red blood cells than the control rats. Hypoxia lowered glutathionereductase activity, thereby reducing the

L 27413-65

ACCESSION NR: AP5005387

ability of red blood cells to hold glutathione in the reduced state. The total content of NADP and NADP-H₂ was higher in the blood of the hypoxic rats than in the controls. Orig. art. has: 1 figure and 2 tables. [CD]

ASSOCIATION: Kafedra biokhimi Pervogo Leningradskogo meditsinskogo instituta imeni I. P. Pavlova (Department of Biochemistry, First Leningrad Medical Institute)

SUBMITTED: 27Sep63

ENCL: 00

SUB CODE: PH, LS

NO REF SOV: 003

OTHER: 013

ATD PRESS: 3192

Card 2/2

U S S R .

✓Polarographic catalytic effect of thiamine. Kh. M. Rubina (I.P. Pavlov 1st Med. Inst., Leningrad). ~~Trav. Acad. Sci. USSR Div. I Med.~~ *Trav. Acad. Sci. USSR Div. I Med.* 37, No. 4, 47-9 (1954).—The polarographic catalytic effect discovered by Brdicka (the appearance of a polarographic wave in an NH_4 buffer contg. Co ions and proteins or amino acids of the type of cystine or cysteine) was attributed to the presence of sulphydryl groups in the protein mol. The same effect was obtained with thiamine. The medium for the polarography was prepd. by adding to the NH_4 buffer (0.1M NH_4Cl and 0.1M NH_4OH) a soln. of CoCl_2 and a freshly prepd. soln. of thiamine in the NH_4 buffer. The concn. of the prepd. solns. had to be such that the concn. of the Co ions of the mixt. was 0.410^{-4}M and thiamine 25-500 γ/cc . The polarography of thiamine was studied in NH_4 buffer with and without addn. of Co ions. The height of the catalytic waves in the presence of Co was much higher than without it. Thiamine gradually decomp. in alk. medium, liberating sulphydryl groups, yet the waves get lower until the max. height disappears, which

Rubina, Kh. M.

The enzymic transfer of phosphate groups from ribonucleic acid to fructosomonophosphate. S. E. Bresler and Kh. M. Rubina (I. P. Pavlov 1st Leningrad Med. Inst.). *Biohimiya* 20, 740-8 (1955).—As a matter of theoretical reasoning it appeared necessary to establish the fact that phosphorylation of ribonucleic acid (I) is in itself capable of bringing about the phosphorylation of any acceptor. Employing previously prepd. phosphorylated I, an attempt was made to bring about the enzymic phosphorylation of fructose-6-phosphate (II) to fructose-1,6-bisphosphate (III) with the aid of myokinase and phosphofructokinase. For the exptl. transfer of labeled P from adenosinetriphosphate (IV) to brewers yeast I was used. The Ba-salt of IV was prepd. from the muscles of rabbits which were injected with solns. of $\text{Na}_2\text{HPO}_4^{32}\text{O}$, which had a specific activity (A_{sp}) of 2-3 mc./ml. The purity of the labeled IV was ascert. from its content of inorganic and hydrolyzable phosphate. Homogenates of either the liver or the brain of rats were used as the enzyme prepn. BaSO_4 or NaF were used as inhibitors. The reaction mixture contained: 0.5 ml. I soln. of labeled Na-IV recovered from 6 mg. of its Ba salt; 0.2 ml. soln. of 0.0003 M MgSO_4 ; 0.1 ml. of the rat liver or brain homogenate. The mixture was adjusted to the required pH with 0.1 N NaOH . Incubation was at 37°. The reaction mixt. was then fractionated by paper chromatography. Migration fractionation with 50% ethanol as the vehicle was allowed to proceed for 24 hrs. The results indicated that excess P belonged to III which was formed at the expense of the enzymic transfer of phosphate from the phosphorylated I to II. It was therefore, concluded that

2
Chin & Biochemistry

(over)